## ABSTRACT

The present invention is directed to a mobility management protocol for supporting real-time and non-real-time multimedia applications on mobile stations of third generation internet

5      protocol (3G-IP) networks. The present invention utilizes as well as extends the session

initiation protocol (SIP) to provide for domain hand-off (i.e., roaming) and subnet hand-off (i.e.,

macro-mobility) so that users can access the network from any location using their own mobile

station as they roam across different 3G-IP networks. The present invention supports mobile

transmission control protocol (TCP) applications without modifying TCP. More specifically,

10     disclosed herein is: a novel use of the SIP INVITE method for IP address binding; a novel use

of the SIP INFO method to provide a means of profile verification and IP address binding; a

novel use of the SIP REGISTER method to allow a SIP registrar to obtain a new IP address

from a Dynamic Host Configuration Protocol (DHCP) server on behalf of the mobile; and an

inventive entity called a SIP_EYE Agent that maintains a record of ongoing TCP connections

15     and releases within the mobile.